

## **8.0 SHORT-TERM USE AND LONG-TERM PRODUCTIVITY**

The FRC would be used for approximately ten years to support bioremediation research. The various types of bioremediation research activities that would take place during the lifecycle of the FRC would result in a greater understanding of fundamental biogeochemical processes in a contaminated subsurface environment.

Resources (staff, land area, etc.) expected to be used during the lifecycle of the FRC, would be minimal. The proposed research at the FRC would not preclude any other activities that might take place at the field locations. However, all future research proposals would be analyzed for their potential to impact long-term productivity. This would be done under the NABIR Program's Tier II NEPA process (as described in Appendix A.)

## **9.0 APPLICABLE ENVIRONMENTAL REGULATIONS, EXECUTIVE ORDERS, PERMITS AND DOE ORDERS**

All operations conducted at the FRC would be conducted in conformance with applicable environmental standards established by federal and state statutes and regulations, executive orders, DOE orders, work smart standards, and compliance and settlement agreements.

The principal regulatory agencies would be the U.S. EPA and state regulators. These agencies issue permits, participate in joint monitoring programs, inspect facilities and operations, and oversee compliance with applicable regulations.

The three DOE program offices with potential interest in the proposed FRC activities are the Office of Science, the Office of Environmental Management (EM), and the Office of Defense Programs. These program offices would be responsible for compliance with the environmental requirements applicable to activities associated with their individual missions. Depending on the nature of the activity to be conducted at the FRC, regulatory oversight and requirements of any of the three program offices might be applicable. Major federal environmental statutes that would apply to the various activities conducted by these programs include:

- Act to Authorize a Study of the Hanford Reach
- Anadromous Fish Conservation Act
- Atomic Energy Act of 1954
- Bald and Golden Eagle Protection Act
- Clean Air Act
- Clean Water Act, including 404 concerning wetlands requirements
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
- Endangered Species Act (ESA)
- Federal Land Policy and Management Act (FLPMA)
- Federal Wildlife Restoration Act
- Fish and Wildlife Coordination Act
- Hazardous Materials Transportation Act (HMTA)
- Migratory Bird Treaty Act (MBTA)
- Mineral Leasing Act
- National Environmental Policy Act (NEPA)
- National Historic Preservation Act (NHPA)
- Occupational Safety and Health Act (OSHA)
- Occupational Radiation Protection
- Oil Pollution Act
- Resource Conservation and Recovery Act (RCRA)

- Safe Drinking Water Act (SDWA)
- Sikes Act
- Surface Mining Control and Reclamation Act
- Toxic Substances Control Act (TSCA)
- Wild and Scenic Rivers Act

Executive orders would include:

- Executive Orders 11644 and 11989: Off-Road Vehicles on Public Lands
- Executive Order 11987: Exotic Organisms
- Executive Order 11988: Floodplain Management
- Executive Order 11990: Protection of Wetlands

The primary state statutes and resource management initiatives would be:

#### **Tennessee**

- Tennessee Air Quality Act
- Tennessee Hazardous Waste Management Act
- Tennessee Petroleum Underground Storage Tank Act
- Tennessee Solid Waste Disposal Act
- Tennessee Water Quality Control Act of 1977

#### **Washington**

- Draft Hanford Site Biological Resource Management Plan
- Draft Hanford Site Biological Resources Mitigation Strategy Plan
- Washington Administrative Code (WAC) 173-470 through 173-481, radionuclides and fluorides
- WAC 246-247, “Radiation Protection—Air Emissions”
- WAC 173-218, “Underground Injection Control Program”
- WAC 173-160, water well drilling on the Hanford site
- WAC 173-216, state permit program for the discharge of waste materials from industrial, commercial, and municipal operations into ground and surface waters of the state
- WAC 173-303, “Dangerous Waste Regulations”
- Washington State Hunting and Fishing Regulations
- Washington State Hydraulic Code
- Washington State Natural Heritage Program

- Washington State Priority Habitats and Species Program
- Washington State Shoreline Management Act
- Definitions of Public Land and their Applicability to Hanford

Relevant DOE policies and orders include:

- DOE P 142.1 and N 142.1, Unclassified Foreign Visits and Assignments
- DOE P 441.1, Radiological Health and Safety Policy
- DOE P 450.4, Safety Management System Policy
- DOE P 450.5, Line Environmental, Safety and Health Oversight
- DOE O 151.1, Chg. 2, Emergency Preparedness
- DOE O 232.1A, Occurrence Reporting
- DOE O 241.1, Scientific and Technical Information Management
- DOE O 430.1A, Life Cycle Asset Management
- DOE O 435.1, Radiological Waste Management
- DOE O 440.1A, Worker Protection
- DOE O 451.1A, National Environmental Policy Act Compliance Program
- DOE O 460.1A, Packaging and Transportation Safety
- DOE O 470.1, Chg. 1, Safeguards and Security Program
- DOE O 474.1, Control and Accountability of Nuclear Materials
- DOE O 1230.2, American Indian Tribal Government Policy
- DOE O 4300.1C, Chg. 1, Real Property Management
- DOE O 5400.5, Chg. 2, Radiological Protection of the Public and the Environment

Other regulations include:

- 49 *CFR* 397, Department of Transportation, “Transportation of Hazardous Materials: Driving and Parking Rules”
- 10 *CFR* 20.1002, Nuclear Regulatory Commission, “Possession License”
- U.S. Fish and Wildlife Service Mitigation Policy
- Public Trust Doctrine